DETAILED ACTION

Response to Amendments
No claims have been amended.
Claim 9 has been canceled.
Claims 1-8 and 10-13 are pending.

Per Examiner's Amendment
Claims 1, 11 and 12 have been amended.
Claims 3 and 13 have been canceled.

<u>Claims 1, 2, 4-8 and 10-12 are allowed</u>.

Response to Arguments

I.   Applicant's arguments (see Remarks pages 5-6 filed 7/20/2007) with respect to claims 1,

11 and 12 have been fully considered and are persuasive. The rejections of claims 1-8 and 10-13

have been withdrawn.

Examiner's Amendment

II.   An Examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with

Atty. Richard Baker on 9/26/2007. The application has been amended as follows:

▪   **Claim 1 (currently amended):** A method for determining the topology of a network

when a network tree, built from data relating to discovered devices of the network, includes one or more

unresolved branches, the method comprising:

for each unresolved branch of the network tree, attempting to determine the type of each of the discovered network devices on the branch,

if the type of each discovered network device on the branch is determined to be <u>an endstation type</u> ~~a non-connecting network device~~, inferring that an undiscovered connecting device is present on the branch; ~~and~~

if the type of at least one discovered network device on the branch is not ~~an~~ <u>an endstation type</u> ~~a non-connecting network device~~, leaving the topology of the branch unresolved<u>; and</u>

<u>presenting the determined network topology as a network map, the map comprising icons representing network devices and lines representing network links, wherein the inferred connecting device is represented differently from a discovered connecting device.</u>

- **Claim 11 (currently amended):** A computer readable medium including a computer program for determining the topology of a network when a network tree, built from data relating to discovered devices of the network, includes one or more unresolved branches, the program comprising the steps of:

attempting to determine the type of each of the discovered network devices on an unresolved branch of the network tree;

inferring that an undiscovered connecting device is present on the unresolved branch if the type of each discovered network device on the branch is determined to be <u>an endstation type</u> ~~a non-connecting network device~~; ~~and~~

if at least one discovered network device on the unresolved branch is determined not to be <u>an endstation type</u> ~~a non-connecting network device~~, leaving the topology of the branch unresolved<u>; and</u>

<u>presenting the determined network topology as a network map, the map comprising icons representing network devices and lines representing network links, wherein the inferred connecting device is represented differently from a discovered connecting device.</u>

- **Claim 12 (currently amended):** A network management apparatus for determining the topology of a network, the apparatus comprising;

a memory for receiving and storing data relating to discovered devices on the network;

a processor, coupled to the memory, the processor configured to build a network tree using the received data, and, for each unresolved branch of the network tree, to attempt to determine the type of each of the discovered network devices on the branch;

wherein, if the type of every discovered network device on an unresolved branch is determined to be an endstation type ~~a non-connecting network device~~, the processor infers that an undiscovered connecting device is present on the branch, and if at least one discovered network device on the unresolved branch is determined not to be an endstation type ~~a non-connecting network device~~, the processor does not infer the topology of the unresolved branch of the network; and

means for presenting a network map showing the determined topology of the network selected from the group consisting of a display and a printer.

- **Cancel**: Claims 3 and 13.

Reasons for Allowance

III. This communication warrants no Examiner's reason for allowance, as Applicant's reply makes evident the reason for allowance, satisfying the record as whole as required by rule 37 CFR 1.104 (e). In this case, the substance of Applicant's comments in the Remarks filed on 7/20/2007 with respect to the claim limitations sufficiently point out the reason claims are patentable over the prior art of record. Thus, the reason for allowance is in all probability evident from the record and no statement of an Examiner's reason for allowance is necessary (see MPEP 13202.14).

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

IV. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The Examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Kristie Shingles
Examiner
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